

# A new species of *Eupomatia* R.Br. (Eupomatiaceae) from Queensland

L.W. Jessup

## Summary

Jessup, L.W. (2002). A new species of *Eupomatia* R.Br. (Eupomatiaceae) from Queensland. *Austrobaileya* 6(2): 333–335. *Eupomatia barbata* Jessup, a new species from the Wet Tropics of north-east Queensland is described and illustrated. A key to identify the three species now recognised in *Eupomatia* is provided.

Key words: *Eupomatia barbata*, Eupomatiaceae, Queensland flora, taxonomy.

L.W. Jessup, Queensland Herbarium, Environmental Protection Agency, Brisbane Botanic Gardens, Mt Coot-tha, Mt Coot-tha Road, Toowong, Queensland 4066, Australia.

## Introduction

The genus *Eupomatia* was formally established by Robert Brown (1814) when he described *E. laurina* R.Br. from Port Jackson, New South Wales. A second species *E. bennettii* was described by F. Mueller (1858) from Clarence River, New South Wales. The genus was originally placed in Annonaceae and is still regarded as closely related to this family as well as to Himantandraceae. The monogeneric family Eupomatiaceae was described (as Eupomatiaceae) by Endlicher (1841). The flowers of *Eupomatia* lack a perianth, the flower being protected in bud by a bract that forms a floral envelope which splits circumferentially in *E. laurina* and irregularly in *E. bennettii* and in the new species described here. The process of anthesis in *E. laurina* and *E. bennettii* was described in detail by Endress (1984).

## Taxonomy

***Eupomatia barbata* Jessup sp. nov.** ab *E. laurina* R. Br. habitu frutice pumilo et inflorescentia flore singulari terminali et ab *E. bennettii* F.Muell. et *E. laurina* staminibus et staminodiis cum pilis dendriticis dense intricatis et staminodiis interioribus cum pilis caespitosis glandulosis nonnisi in paginis adaxialibus differt. **Typus:** Queensland: COOK DISTRICT. Noah's Head area, Cape Tribulation, Oct 1971, *L.J. Webb & J.G. Tracey* 10269; (holo: BRI).

Shrub to 1m, often flowering at less than 30cm high; roots with tubers. Leaves oblanceolate or narrowly obovate, acuminate; petiole 2.5–6 mm long, decurrent as with stem ridges. lamina 6–22 cm long, 1.5–5.5 cm wide, glabrous adaxially above, pilose adaxially below with isolated simple and dendritic hairs, glabrescent; base attenuate; secondary veins 10–14 pairs. Flower usually solitary, white, terminal; peduncle c. 0.5 cm long above the uppermost foliaceous bract. Floral envelope cap conical with an attenuate tip, bluish-green, splitting irregularly at anthesis. Stamens ovate, oblong or obspathulate, 3.5–6.5 mm long, 1.2–2.5 mm wide near their base; anthers oblong, 1.8–2.5 mm long. Anther thecae and upper margins of stamens and outer staminodes bearded with densely entangled hyaline, dendritic hairs, 0.5–1 mm long. Outer staminodes membranous, ovate, 6–7 mm long, 3.5–4 mm wide. Inner staminodes fleshy, oblong, 5–7 mm long, 2.5–4 mm wide; glandular hair tufts on short pedestals on the adaxial surface. Aggregate fruit obconical, 1.5–2 cm diam. Fig. 1.

**Specimens examined:** Queensland. COOK DISTRICT: Speewah, upper Clohesy River, Mar 1948, *Brass* 18218 (BRI); Junction Creek, Russell River, Apr 1948, *Brass* 18270 (BRI); Mt Hedley, 3km east-northeast of Rossville, Timber Reserve 165, Apr 1999, *Forster* PIF24273 & *Booth* (BRI); State Forest 310, Goldsborough, 13.5km along Goldsborough Road, Jul 2000, *Forster* PIF25896, *Booth* and *Jensen* (BRI); Bingil Bay, Clump Point National Park, Jul 2000, *Forster* PIF25947 & *Booth* (BRI); 'Cauliflorous fig' site W of lower Kraft Creek, Jul 1995, *Hunter* JH5037 (BRI); Crawfords Lookout to Tchupalla Falls track, Feb 1982, *Jessup* 475 & *Tracey* (BRI); c. 1km W of Garradunga and c. 14km N of Innisfail, Nov 1982, *Jessup* 508 (BRI); upper reaches of



**Fig. 1.** A & B: *Eupomatia laurina*. A. flower  $\times 2$ ; B. stamens and staminodes  $\times 3$ . C & D: *Eupomatia bennettii*. C. flower  $\times 2$ ; D. stamens and staminodes  $\times 3$ . E & F: *Eupomatia barbata*. E. flower  $\times 2$ ; F. stamens and staminodes  $\times 3$ . A & B: Jessup 902 (BRI). C & D: Bostock s.n. AQ567859 (BRI). E & F: Sankowsky s.n. AQ567858 (BRI). Del. W. Smith.

North Johnstone River in SF 755 on road from Glen Allyn and NE of Millaa Millaa, Nov 1982, *Jessup* 528 (BRI); Nandroya Falls track, Henrietta Creek, Nov 1992, *Jessup* 908 (BRI); Noah Head, 5.6km SSW of Cape Tribulation beach, Nov 1988, *Jessup* GJM641, *Guymner & McDonald* (BRI); South of Junction of E and W Mulgrave Rivers, SF 310, Goldfield LA, Nov 1988, *Jessup* GJM1661, *Guymner & McDonald* (BRI); Stallion Pocket, 8.6km SSE of Little Mulgrave township, Nov 1988, *Jessup* GJM1857, *Guymner & McDonald* (BRI); Jordan LA, 16.5km SE Millaa Millaa, Oct 1988, *Jessup* GJM2006, *Guymner & McDonald* (BRI); Downey Creek, SA 34, 24.6km SE of Millaa Millaa, Oct 1988, *Jessup* GJM2191, *Guymner & McDonald* (BRI); 1.4km SE of Cooroo Peak at the head of Culla Creek, 14km NW of South Johnstone, Oct 1988, *Jessup* GJM2554, *Guymner & McDonald* (BRI); Shiptons Flat, Nov 1992, *Sankowsky* (BRI) (spirit material only); Juara Creek area, c. 16km NE of Atherton, Aug 1948, *Smith* 3785 (BRI); Baileys Creek, north of Daintree River, 1962, *Webb & Tracey* 6483 (BRI); Boonjee, W of Mt Bartle Frere, 1962, *Webb & Tracey* 6563, 6580 (BRI); Gregory Falls, Lower Palmerston via Innisfail, 1962, *Webb & Tracey* 6629 (BRI); Miriwinni near Mt Bartle Frere, 1962, *Webb & Tracey* 6675 (BRI); El Arish-Mission Beach Road, 1962, *Webb & Tracey* 6789 (BRI); Macnamee Creek National Park W of Mena Creek, near Innisfail, Oct 1968, *Webb & Tracey* 11369 (BRI); Mt Sampson, Jun 1973, *Webb & Tracey* 11827 (BRI);

Brinsmead Road near Cairns, Dec 1977, *Webb & Tracey* 13736 (BRI); Bellenden Ker, Mar 1922, *White* 1254 (BRI) (ft); between Cairns and Herberton, 1891, *Wild* s.n. (BRI) (fl). NORTH KENNEDY DISTRICT: near Koolmoon Creek, Apr 1956, *White* 1304 (BRI).

**Distribution and Habitat:** Occurs from the Annan River to the Tully River, Queensland, in mesophyll and notophyll vine forest.

**Conservation Status:** The species is adequately conserved in the National Parks throughout its range.

**Etymology:** The specific epithet is from Latin *barba*, a beard, referring to the tangled hairs present on the stamens and outer staminodes.

#### Acknowledgements

I would like to thank Garry Sankowsky for providing spirit material of the new species, Will Smith for the line drawings and Les Pedley for checking the Latin diagnosis.

#### Key to species of *Eupomatia*

1. Woody shrub or small tree; stem internodes terete; flowers axillary ..... **E. laurina**  
Herbaceous shrubs with few leaves; stem internodes 2-ridged, decurrent  
with petiole; flower terminal, usually solitary ..... 2
2. Stamens glabrous or with scattered minute hairs; inner staminodes with  
glandular hair tufts on margins and both surfaces ..... **E. bennettii**  
Stamens and outer staminodes with densely entangled dendritic hairs; inner  
staminodes with glandular hair tufts only an adaxial surface ..... **E. barbata**

#### References

- BROWN, R. (1814) . In Flinders, *Voyage Terra Australis* 2 (App.3): 597.
- ENDLICHER, S.L. (1841). *Eupomatiaceae. Enchiridion botanicum*. 425. Leipzig, W. Engelmann; Wien, Fr. Beck et al.
- ENDRESS, P.K. (1984). The flowering process in the Eupomatiaceae (Magnoliales), *Bot. Jahrb. Syst.* 104(3): 297–319.
- MUELLER, F. (1858) *Fragmenta Phytographie Australiae* 1:45. Melbourne: Victorian Government.